In their discussion Walsh et al raise the question whether assertive community treatment and intensive case management need modifying to be more effective in patients prone to violent behaviour. To date there is not much evidence on the form these modifications would have to take. Actually, a rather effective treatment for violence in seriously mentally ill people is available, but only for limited periods: hospital treatment. Our group has shown a continuous day by day reduction in the incidence of violent behaviour among inpatients with schizophrenia, resulting in very low rates after some weeks of treatment.⁶

Violence in acute psychiatric units is strongly associated with the severity of psychotic symptoms, while factors such as substance abuse, non-compliance with medication, criminal peers, and poor living conditions are minimised under the regimen of psychiatric wards, which can be locked and where medication and drug abstinence can be enforced. Conditions in the community are quite different. In a systematic meta-analysis of research on predictors of criminal and violent recidivism among mentally disordered offenders Bonta et al found that predictors of violence in people with major mental disorders are nearly the same as those in people without such disorders: criminal history, age, substance abuse, deviant lifestyle, family problems, antisocial personality disorder.7 These findings are confirmed by the results of Walsh et al. In contrast to these so called "static" variables, "dynamic" variables such as psychopathology and clinical assessments were identified as only weak predictors of violent behaviour in the community.8

From this point of view, therefore, it is no surprise that measures of therapeutic care in the community do not yield substantial results in what is more a problem of general crime prevention than of mental illness. As Walsh et al emphasise, further research should address the question of whether forms of compulsory outpatient treatment combined with psychosocial support can be developed. These need to be effective in reducing violence in a core group of mentally disordered people.

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Non-attendance at general practices and outpatient clinics

Local systems are needed to address local problems

on-attendance at NHS outpatient clinics and at general practices is more common in deprived populations. It results from the organisation of these services, which currently puts the needs of staff before those of patients. Discuss." Proposing this debate at your next management away day should enliven proceedings. What evidence exists for the various parts of the statement?

The national figure of 12% for non-attendance at outpatient clinics in the United Kingdom hides large variations between specialties and between regions. Studies report figures that range from 5% to 34%. Much less research has been done on non-attendance in general practices, though figures of 3% and 6.5% have been reported. The first figure comes from an unpublished doctor-patient partnership survey in 1998 and an unpublished survey (by WH) of 500 non-attenders in Exeter. The higher figure is from a study of 221 000 appointments in practices in Sheffield. See 12.

Different methods have been used to assess deprivation, such as extrapolation from postcode data, information from interviews or postal questionnaires, and validated indices of deprivation.⁴⁻⁷ The main asso-

ciations with hospital non-attendance are reported as being male sex, youth, the length of waiting time for the appointment, and deprivation. ¹⁴⁻⁸ Multivariable analysis of the 2072 patients referred to outpatient clinics in our prospective study showed these four factors to independently predict non-attendance at outpatient clinics (unpublished data). ⁹ Non-attendance in general practices is associated with youth and deprivation (assessed by the referring practice's Townsend score) but not sex. ³

Non-attenders are less likely to own a car or a telephone and are more likely to be unemployed.^{4 6 7 10} The finding about telephones may be pertinent, because some non-attendance arises from an inability to cancel the appointment, either because the hospital's system for cancelling or changing appointments is poor or because the patient has no access to a telephone.^{7 11} Non-attendance is not thought to be related to the severity of the patient's condition, except in the case of psychiatric illness, where non-attendance may be a marker of severity of illness.^{6 8}

Questionnaire surveys of non-attenders provide further evidence for the link with deprivation.^{7 8} The

BMJ 2001;323:1081-2

Munk-Jørgensen P. Has deinstitutionalization gone too far? Eur Arch Psychiatry Clin Neurosci 1999;249:136-43.

² Webster CD, Douglas KS, Belfrage H, Link BG. Capturing change. An approach to managing violence and improving mental health. In: Hodgins S, ed. Violence among the mentaly ill. Effective treatments and management strategies. Dordrecht: Kluwer Academic Publishers, 2000:119-44.

³ Torrey E. Jails and prisons: America's new mental hospitals. Am J Public Health 1995;85:1611-3.

⁴ Koegel P, Burnam MA, Farr RK. The prevalence of specific psychiatric disorders among homeless individuals in the inner city of Los Angeles. Arch Gen Psychiatry 1988;45:1085-92.

⁵ Walsh E, Gilvarry C, Samele C, Harvey K, Manley C, Tyrer P, et al. Reducing violence in severe mental illness: randomised controlled trial of intensive case management compared with standard care. BMJ 2001;323:1093-6.

⁶ Steinert T, Sippach T, Gebhardt RP. How common is violence despite neuroleptic treatment? *Pharmacopsychiatry* 2000;33:98-102.

⁷ Bonta J, Law M, Hanson K. The prediction of criminal and violent recidivism among mentally disordered offenders: a meta-analysis. *Psychol Bull* 1998;123:123-42.

⁸ Harris GT, Rice ME. Risk appraisal and management of violent behavior. Hosp CommunityPsychiatry 1997;48:1168-76.

commonest reasons cited for missing an appointment, after forgetting it, are family or work commitments. Patients with lower paid jobs may have difficulty in getting time off work or arranging childcare. These reasons also partly explain the peak age range of 20-30 in non-attenders, as this is the usual age for raising a family.3 4

The organisation of clinics and surgeries gives further insight. The strategy of overbooking appointments to allow for anticipated non-attendance may be counterproductive. Attendance of 100% puts pressure on both patients and staff. Also, overbooking means that the appointment time is rarely met, so patients have to clear their commitments for the whole morning or afternoon. For some people this is impossible, and for others the difficulty may be enough to tip the balance towards not attending.12

The key seems to be to allow the patient to select a suitable time and date-indeed, such flexibility may largely explain the lower non-attendance rate in general practices, although evening surgeries and shorter time intervals to the appointment probably also contribute. No hospitals have reported their experience of offering evening or weekend clinics. Several hospitals have instituted systems offering patients a choice of time and date.^{11 13} Some clinics offer telephone reminders, although the issue of confidentiality of telephone calls has not been examined.2 11 These strategies have resulted in reductions in non-attendance of up to 60%.13 No formal economic analyses have been published—and they necessary-but some hospitals report that the additional staff and telephone costs outweigh the efficiency gains.¹¹ This view may be short sighted, as simply adding up the costs misses two crucial gains. Firstly, the strongest predictor of non-attendance is the time interval to the appointment; reducing non-attendance reduces waiting times, which further reduces nonattendance, creating a virtuous circle.4 Secondly, systems that require input from the patient before the appointment takes place identify a number of patients who fail to reply. This failure may arise either from administrative errors such as wrong addresses or because patients are particularly disadvantaged by deprivation or illness.6

However, increasing the flexibility and therefore the complexity of appointment systems carries a risk: patients most in need may be disempowered. Patients

who cannot read English, because of learning difficulties or cultural background, or patients with sensory disabilities may struggle with newer systems. As long as these local factors are known, individual solutions can be tailored, such as avoiding making appointments for Muslim patients on important religious dates or in the wrong language.2

So, how should the managers at the away day answer our provocative question? Increased consumerism in the NHS means that current systems are stale, at best. No single solution will work across the NHS and in outpatient clinics as well as general practices. Local trusts in primary and secondary care should be able to devise local systems to allow convenient access for their patients. Any new systems should be the subject of research and development. If some of these measures are adopted non-attendance should fall, though it will never disappear-we are all human.

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The future of rehabilitation

Lies in retraining, replacement, and regrowth

ealthcare delivery continues to focus on acute illness and the threat of death, but contact with healthcare systems is dominated by people with chronic conditions. In the United States they account for nearly 50% of those in contact with healthcare but nearly 80% of healthcare costs.1 Neurological damage accounts for about 40% of those people most severely disabled, who require daily help, and the majority of people with complex disabilities resulting from a combination of physical, cognitive, and behavioural impairments.^{2 3} In the United Kingdom until recently the involvement of neurologists in these patients' rehabilitation, was not obviously encouraged. However, there are positive signs of change, and combined therapies and restorative neurology are likely to attract more neurologists to the challenges of rehabilitation.

In the past senior representatives of rehabilitation medicine apparently considered it possible for doctors with little or no previous neurological exposure to

BMI 2001:323:1082-3

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Hamilton W, Round A, Sharp D. Patient, hospital and general practitioner characteristics associated with non-attendance; a cohort study. Br J Gen Pract (in press).

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¹¹ Improving attendance at ENT clinics. *Impact* 2000;2:5-6.
12 Andrews R, Morgan JD, Addy DP, McNeish AS. Understanding non-attendance in outpatient paediatric clinics. Arch Dis Child 1990:65:192-5.

¹³ Read M, Byrne P, Walsh A. Dial a clinic-a new approach to reducing the number of defaulters. Br J Healthcare Manage 1997;3:307-10